

WHAT IS CLAIMED IS:

1 1. A writing head for forming an electrostatic latent image on a
2 cylindrical image carrier, comprising:

3 a flexible film substrate;

4 a plurality of writing electrodes, arranged on a first face of the film
5 substrate in a first direction parallel with an axial direction of the image carrier,
6 the writing electrodes adapted to be abutted against an outer periphery of the
7 image carrier to provide electric charges thereto;

8 a first wiring member, arranged on the first face of the film substrate
9 to supply signals from a first electrode driver to a first electrode group in the
10 writing electrodes; and

11 a second writing member, arranged on a second face of the film
12 substrate to supply signals from a second electrode driver to the second
13 electrode group in the writing electrodes.

1 2. The writing head as set forth in claim 1, wherein the film substrate is
2 formed with at least one through hole through which the second wiring member
3 extends to the second electrode group.

1 3. The writing head as set forth in claim 1, wherein the second wiring
2 member extends to the second electrode group via a side edge of the film
3 substrate.

1 4. The writing head as set forth in claim 1, wherein the first face and the
2 second face of the film substrate are defined by a single outer face of a folded
3 film member.

1 5. The writing head as set forth in claim 1, wherein the writing electrodes
2 are arranged so as to form a plurality of arrays which are arranged in a second
3 direction perpendicular to the first direction.

1 6. The writing head as set forth in claim 5, wherein the writing electrodes
2 are arranged such that writing electrodes in adjacent arrays forms a zigzag
3 arrangement with regard to the first direction.

1 7. The writing head as set forth in claim 5, wherein the writing electrodes
2 are arrayed with regard to both of the first direction and the second direction.

1 8. The writing head as set forth in claim 1, wherein:
2 the film substrate comprises a first layer forming the first face and a
3 second layer forming the second face;
4 the wiring head further comprises a third wiring member, arranged
5 between the first layer and the second layer to supply signals from a third
6 electrode driver to a third electrode group in the writing electrode.

1 9. The writing head as set forth in claim 1, wherein the film substrate is
2 integrally formed with a reinforcement member which provides a reinforcement
3 for the film substrate in a second direction perpendicular to the first direction.

1 10. The writing head as set forth in claim 9, wherein the reinforcement
2 member extends in the first direction so as to support at least a region where
3 the writing electrodes are arranged.

1 11. The writing head as set forth in claim 10, wherein:
2 the writing electrodes are arranged so as to form a plurality of arrays
3 which are arranged in the second direction; and
4 the reinforcement member extends in the second direction so as to
5 support at least a region where the arrays of the writing electrodes are
6 arranged.

1 12. The writing head as set forth in claim 9, wherein the reinforcement
2 member extends so as to avoid a portion where each of the writing electrodes
3 is disposed.

1 13. An image forming apparatus for forming a visible image from the
2 electrostatic latent image formed by the wiring head as set forth in claim 1.

1 14. A writing head for forming an electrostatic latent image on a
2 cylindrical image carrier, comprising:
3 a flexible film substrate;
4 a plurality of writing electrodes, arranged on a first face of the film
5 substrate in a first direction parallel with an axial direction of the image carrier,
6 the writing electrodes adapted to be abutted against an outer periphery of the

7 image carrier to provide electric charges thereto;
8 a wiring member, arranged on the first face of the film substrate to
9 supply signals from an electrode driver to the writing electrodes; and
10 a reinforcement member, integrally formed with the film substrate to provide a
11 reinforcement for the film substrate in a second direction perpendicular to the
12 first direction.

1 15. The writing head as set forth in claim 14, wherein the reinforcement
2 member extends in the first direction so as to support at least a region where
3 the writing electrodes are arranged.

1 16. The writing head as set forth in claim 15, wherein:
2 the writing electrodes are arranged so as to form a plurality of arrays
3 which are arranged in the second direction; and
4 the reinforcement member extends in the second direction so as to
5 support at least a region where the arrays of the writing electrodes are
6 arranged.

1 17. The writing head as set forth in claim 14, wherein the reinforcement
2 member extends so as to avoid a portion where each of the writing electrodes
3 is disposed.

1 18. The writing head as set forth in claim 14, wherein the reinforcement
2 member is formed on a second face of the film substrate.

1 19. An image forming apparatus for forming a visible image from the
2 electrostatic latent image formed by the wiring head as set forth in claim 14.

1 20. A method of manufacturing a writing head for forming an electrostatic
2 latent image on an image carrier, comprising steps of:

3 providing a flexible film member;

4 forming a plurality of writing electrodes on a first face of the film
5 member;

6 forming a first wiring member on the first face of the film member so
7 as to be connected to a first electrode group in the writing electrodes;

8 forming a second wiring member on the first face of the film member
9 so as to be connected to a second electrode group in the writing electrodes;

10 defining a folding line on the film member so as to avoid the writing
11 electrodes; and

12 folding the film member at the folding line to form a film substrate,
13 such that the first wiring member and the second wiring member are arranged
14 on opposite faces of the film substrate.

1 21. The manufacturing method as set forth in claim 20, further comprising
2 a step of applying an adhesive agent on at least a part of a second face of the
3 film member which is to be an inner face at the step of folding the film member.